AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1. (Currently Amended) A recombinant or isolated collagen binding integrin subunit α10 consisting of ~~essentially the amino acid sequence shown in SEQ ID No. 2 or SEQ ID No. 4, or homologues~~ SEQ ID NO: 2 or fragments thereof, wherein the fragments are selected from the group consisting of amino acid 952 to amino acid 986 of SEQ ID NO: 2, amino acid 140 to amino acid 337 of SEQ ID NO:2, and SEQ ID NO: 7 ~~having essentially the same biological activity~~.

Claims 2 to 22. (Canceled)

Claim 23. (Currently Amended) A fragment of the integrin subunit α10, wherein the fragment is a peptide comprising ~~the amino acid sequence SEQ ID No. 7~~ SEQ ID NO: 7.

Claim 24. (Currently Amended) A fragment of the integrin subunit α10, wherein the fragment is a peptide comprising ~~the amino acid sequence from about~~ amino acid ~~No.~~ 952 to ~~about~~ amino acid ~~no.~~ 986 of ~~SEQ ID No:2~~ SEQ ID NO: 2.

Claim 25. (Currently Amended) A fragment of the integrin subunit α10, wherein the fragment is a peptide comprising ~~the amino acid sequence from about~~ amino acid ~~No.~~ 140 to ~~about~~ amino acid ~~no.~~ 337 of ~~SEQ ID No:2~~ SEQ ID NO: 2.

Claims 26 to 125. (Canceled)

Claim 126. (Currently Amended) The integrin subunit α10 ~~as defined in~~ of claim ~~1,~~ 138, wherein the integrin subunit α10 is a polypeptide attached to a detectable moiety for detecting presence of transplanted cartilage or transplanted chondrocyte cells expressing said polypeptide in a subject transplanted with said cartilage or chrondrocyte cells ~~or target in transplantation of cartilage or chondrocytes~~.

Claims 127 to 137. (Canceled)

Claim 138. (New) A recombinant or isolated collagen binding integrin subunit α10 comprising SEQ ID NO: 2 or fragments thereof, wherein the fragments are amino acid 952 to amino acid 986 of SEQ ID NO: 2, amino acid 140 to amino acid 337 of SEQ ID NO: 2, or SEQ ID NO: 7.

Claim 139. (New) A fragment of the integrin subunit α10, wherein the fragment is a peptide consisting of SEQ ID NO:7.

Claim 140. (New) A fragment of the integrin subunit α10, wherein the fragment is a peptide consisting of amino acid 952 to amino acid 986 of SEQ ID NO:2.

Claim 141. (New) A fragment of the integrin subunit α10, wherein the fragment is a peptide consisting of amino acid 140 to amino acid 337 of SEQ ID NO:2.

Claim 142. (New) A recombinant or isolated collagen binding integrin subunit α10 consisting of SEQ ID NO:4 or fragments thereof wherein the fragments are selected from the group consisting of amino acid 140 to amino acid 337 of SEQ ID NO:2 and SEQ ID NO:7.

Claim 143. (New) A recombinant or isolated collagen binding integrin subunit α10 comprising SEQ ID NO: 4 or fragments thereof wherein the fragments are selected from the group consisting of amino acid 140 to amino acid 337 of SEQ ID NO:2 and SEQ ID NO:7.

Claim 144. (New) A method of determining the differentiation of cells during development comprising:

(i) obtaining cells; and

(ii) assaying the cells for the expression of an integrin subunit α10 or a fragment thereof of claim 1 or for the expression of a nucleic acid which encodes said integrin subunit α10, or fragment thereof, and

wherein the cells are selected from the group consisting of chondrocytes, smooth muscle cells, endothelial cells, osteoblasts, or fibroblasts, or stem cells of said cells.

Claim 145. (New) A method for detecting transplanted cartilage or chondrocyte cells comprising obtaining a sample of cells from a patient transplanted with said cells, and assaying said sample for the expression of an integrin subunit α10 or a fragment thereof of claim 1 or for the expression of a nucleic acid which encodes said integrin subunit α10, or fragment thereof.

Claim 146. (New) The integrin subunit α10 of claim 143, wherein the integrin subunit α10 is a polypeptide attached to a detectable moiety for detecting presence of transplanted cartilage or transplanted chondrocyte cells expressing said polypeptide in a subject transplanted with said cartilage or said chrondrocyte cells.